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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,537	04/24/2001	Shunpei Yamazaki	SEL 255	5906

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EXAMINER
PRENTY, MARK V

ART UNIT	PAPER NUMBER
2822	

DATE MAILED: 09/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/841,537	YAMAZAKI ET AL.	
	Examiner	Art Unit	
	MARK V PRENTY	2822	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 September 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

This Office Action is in response to the amendment filed September 12, 2003.

Claims 1-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki et al. (United States Patent Application Publication US 2001/0040655 – hereafter Yamazaki – submitted in the IDS filed December 26, 2002).

With respect to independent claim 1, Yamazaki discloses a semiconductor device (see the entire patent, particularly the Fig. 19 disclosure) comprising: a thin film transistor 801 comprising a semiconductor layer over a substrate and a gate electrode with an insulating film interposed therebetween; a plurality of projected portions 701, 702 over said substrate; an interlayer insulating film 804 covering said thin film transistor and said plurality of projected portions, said interlayer insulating film having a projected and recessed surface; and a pixel electrode 805 electrically connected to said thin film transistor, said pixel electrode having a projected and recessed surface on said interlayer insulating film, wherein said projected surface of said pixel electrode has a radius of curvature from 0.1 to 4 μm (see paragraph [0189]).

Claim 1 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 2, Yamazaki's projected portions 701, 702 comprise a same material as one selected from the group consisting of a semiconductor layer, a gate electrode, and a gate insulating film of said thin film transistor.

Claim 2 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 3, Yamazaki's projected portions 701, 702 have different heights or different shapes.

Claim 3 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 4, Yamazaki's pixel electrode 805 comprises one selected from the group consisting of Al, Ag, and a lamination of Al and Ag (see paragraph [0022], for example).

Claim 4 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 5, Yamazaki's semiconductor device further comprises a first light shielding portion comprising laminated layers of a first color layer and a second color layer; and a second light shielding portion comprising laminated layers of said first color layer and a third color layer; wherein said first light shielding portion and said second light shielding portion are formed to overlap in an interval between an arbitrary one of said pixel electrode and said pixel electrode contiguous to said arbitrary one of said pixel electrode (see paragraph [0017], for example).

Claim 5 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 6, Yamazaki's first color layer comprises a red color, said second color comprises a blue color, and said third color layer comprises a green color (see paragraph [0019], for example).

Claim 6 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 7, Yamazaki's first light shielding portion and second light shielding portion are provided over an opposed substrate (see paragraph [0021], for example).

Claim 7 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 8, Yamazaki's semiconductor device is a reflection type liquid crystal display device (see paragraph [0022], for example).

Claim 8 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 9, Yamazaki's semiconductor device is at least one selected from the group consisting of a personal computer, a video camera, a mobile computer, a portable telephone, a goggle-type display, a digital camera, a player using a recording medium, and a portable electronic book (see paragraphs [0027] and [0028], for example).

Claim 9 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to independent claim 10, Yamazaki discloses a semiconductor device (see the entire patent, particularly the Fig. 19 disclosure) comprising: a thin film transistor 801 comprising a semiconductor layer on an insulating surface, an insulating film on said semiconductor layer and a gate electrode on said insulating film; a plurality

of projected portions 701, 702 on said insulating surface; and a pixel electrode 805 having a projected and recessed surface, and electrically connected to said thin film transistor, wherein said projected surface of said pixel electrode has a radius of curvature from 0.1 to 4 μm (see paragraph [0189]).

Claim 10 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 11, Yamazaki's projected portions 701, 702 comprise a same material as one selected from the group consisting of a semiconductor layer, a gate electrode, and a gate insulating film of said thin film transistor.

Claim 11 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 12, Yamazaki's projected portions 701, 702 have different heights or different shapes.

Claim 12 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 13, Yamazaki's pixel electrode 805 comprises one selected from the group consisting of Al, Ag, and a lamination of Al and Ag (see paragraph [0022], for example).

Claim 13 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 14, Yamazaki's semiconductor device further comprises a first light shielding portion comprising laminated layers of a first color layer

and a second color layer; and a second light shielding portion comprising laminated layers of said first color layer and a third color layer; wherein said first light shielding portion and said second light shielding portion are formed to overlap in an interval between an arbitrary one of said pixel electrode and said pixel electrode contiguous to said arbitrary one of said pixel electrode (see paragraph [0017], for example).

Claim 14 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 15, Yamazaki's first color layer comprises a red color, said second color comprises a blue color, and said third color layer comprises a green color (see paragraph [0019], for example).

Claim 15 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 16, Yamazaki's first light shielding portion and second light shielding portion are provided over an opposed substrate (see paragraph [0021], for example).

Claim 16 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 17, Yamazaki's semiconductor device is a reflection type liquid crystal display device (see paragraph [0022], for example).

Claim 17 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 18, Yamazaki's semiconductor device is at least one selected from the group consisting of a personal computer, a video camera, a mobile computer, a portable telephone, a goggle-type display, a digital camera, a player using a recording medium, and a portable electronic book (see paragraphs [0027] and [0028], for example).

Claim 18 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to independent claim 19, Yamazaki discloses a semiconductor device (see the entire patent, particularly the Fig. 19 disclosure) comprising: a thin film transistor comprising a semiconductor layer over a substrate and a gate electrode with an insulating film interposed therebetween; a plurality of projected portions 701, 702 over said substrate; an interlayer insulating film 804 covering said thin film transistor and said plurality of projected portions, said interlayer insulating film having a projected and recessed surface; and a pixel electrode 805 electrically connected to said thin film transistor, said pixel electrode having a projected and recessed surface on said interlayer insulating film, wherein said projected surface of said pixel electrode has a radius of curvature from 0.1 to 4 μm (see paragraph [0189]).

Claim 19 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 20, Yamazaki's projected portions 701, 702 have different heights or different shapes.

Claim 20 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 21, Yamazaki's pixel electrode 805 comprises one selected from the group consisting of Al, Ag, and a lamination of Al and Ag (see paragraph [0022], for example).

Claim 21 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 22, Yamazaki's semiconductor device further comprises a first light shielding portion comprising laminated layers of a first color layer and a second color layer; and a second light shielding portion comprising laminated layers of said first color layer and a third color layer; wherein said first light shielding portion and said second light shielding portion are formed to overlap in an interval between an arbitrary one of said pixel electrode and said pixel electrode contiguous to said arbitrary one of said pixel electrode (see paragraph [0017], for example).

Claim 22 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 23, Yamazaki's first color layer comprises a red color, said second color comprises a blue color, and said third color layer comprises a green color (see paragraph [0019], for example).

Claim 23 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 24, Yamazaki's first light shielding portion and second light shielding portion are provided over an opposed substrate (see paragraph [0021], for example).

Claim 24 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 25, Yamazaki's semiconductor device is a reflection type liquid crystal display device (see paragraph [0022], for example).

Claim 25 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 26, Yamazaki's semiconductor device is at least one selected from the group consisting of a personal computer, a video camera, a mobile computer, a portable telephone, a goggle-type display, a digital camera, a player using a recording medium, and a portable electronic book (see paragraphs [0027] and [0028], for example).

Claim 26 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to independent claim 27, Yamazaki discloses a semiconductor device (see the entire patent, particularly the Fig. 19 disclosure) comprising: a thin film transistor 801 comprising a semiconductor layer on an insulating surface, an insulating film on said semiconductor layer and a gate electrode on said insulating film; a plurality of projected portions 701, 702 on said insulating film; and a pixel electrode 805 having a projected and recessed surface, and electrically connected to said thin film transistor,

wherein said projected surface of said pixel electrode has a radius of curvature from 0.1 to 4 μm (see paragraph [0189]).

Claim 27 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 28, Yamazaki's projected portions 701, 702 comprise a same material as a gate electrode of said thin film transistor.

Claim 28 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 29, Yamazaki's projected portions 701, 702 have different heights or different shapes.

Claim 29 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 30, Yamazaki's pixel electrode 805 comprises one selected from the group consisting of Al, Ag, and a lamination of Al and Ag (see paragraph [0022], for example).

Claim 30 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 31, Yamazaki's semiconductor device further comprises a first light shielding portion comprising laminated layers of a first color layer and a second color layer; and a second light shielding portion comprising laminated layers of said first color layer and a third color layer; wherein said first light shielding portion and said second light shielding portion are formed to overlap in an interval

between an arbitrary one of said pixel electrode and said pixel electrode contiguous to said arbitrary one of said pixel electrode (see paragraph [0017], for example).

Claim 31 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 32, Yamazaki's first color layer comprises a red color, said second color comprises a blue color, and said third color layer comprises a green color (see paragraph [0019], for example).

Claim 32 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 33, Yamazaki's first light shielding portion and second light shielding portion are provided over an opposed substrate (see paragraph [0021], for example).

Claim 33 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 34, Yamazaki's semiconductor device is a reflection type liquid crystal display device (see paragraph [0022], for example).

Claim 34 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

With respect to dependent claim 35, Yamazaki's semiconductor device is at least one selected from the group consisting of a personal computer, a video camera, a mobile computer, a portable telephone, a goggle-type display, a digital camera, a player

using a recording medium, and a portable electronic book (see paragraphs [0027] and [0028], for example).

Claim 35 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki.

The applicant's argument at the third paragraph on page 12 of its response is incorrect. Specifically, contrary to the applicant's argument, Yamazaki does teach that the projected surface of the pixel electrode has a radius of curvature from 0.1 to 4 μm (again, see Yamazaki at paragraph [0189]).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Registered practitioners can telephone examiner Prenty at (703) 308-4939. Any voicemail message left for the examiner must include the name and registration number of the registered practitioner calling, and the Application/Control (Serial) Number. Technology Center 2800's general telephone number is (703) 308-0956.

Mark Prenty